

## EAST Search History

L14	1	"3773579".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:47
L15	2	"3833502".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:47
L16	1	"3980571".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:48
L17	1	"4169068".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:48
L18	1	"4169068".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:48
L19	1	"4269739".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:48
L20	1	"4169068".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L21	1	"4269739".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L22	1	"4313837".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L23	1	"4673509".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L24	1	"4769162".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L25	1	"4927550".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:49
L26	1	"5062978".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L27	1	"5110494".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L28	1	"5132046".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L29	1	"5170683".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L30	1	"5185235".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L31	1	"5207838".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:50
L32	1	"5215675".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:51
L33	1	"5349149".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:51

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12364	laser and (crack or scribe or cleave or glass or brittle or silica or silicon) and surfactant and cooling	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:26
L2	600	(laser same (crack or scribe or cleave or glass or brittle or silica or silicon)) and (surfactant with (cationic or (non adj ionic) or anionic)) and (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:27
L3	205	(laser with (crack or scribe or cleave or glass or brittle or silica or silicon)) and (surfactant with (cationic or (non adj ionic) or anionic)) and (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:28
L4	0	(laser with (crack or scribe or cleave or glass or brittle or silica or silicon)) same (surfactant with (cationic or (non adj ionic) or anionic)) same (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:28
L5	8	(laser with (crack or scribe or cleave or glass or brittle or silica or silicon)) and (surfactant with (cationic or (non adj ionic) or anionic)) same (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:29
L6	3	(laser with (crack or scribe or cleave or glass or brittle or silica or silicon)) same (surfactant with (cationic or (non adj ionic) or anionic)) and (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:28
L7	4	(laser same (surfactant with (cationic or (non adj ionic) or anionic)) with (coolant or cooling))	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:30
L8	11	"219"/\$.ccls. and (laser and (surfactant with (cationic or (non adj ionic) or anionic)) and (coolant or cooling))	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:53
L9	14	"5534172"	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:39
L10	2	"3000826".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:46
L11	2	"3079340".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:46
L12	1	"3719598".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:47
L13	1	"3719598".PN.	USPAT; USOCR	OR	OFF	2007/11/09 17:47

CN Accelerator DT 3126-1  
 CN Acetoquat CTAB  
 CN Arquad 16/60  
 CN BCTA  
 CN Bromat  
 CN Catinal HTB 70ET  
 CN Cetremide  
 CN Cetrimonium bromide  
 CN Cetyltrimethylammonium bromide  
 CN Cirrasol OD  
 CN CTAB  
 CN CTABr  
 CN CTMAB  
 CN CTMB  
 CN HDTMA-Br  
 CN Hexadecanyletrimethylammonium bromide  
 CN Hexadecyltrimethylamine bromide  
 CN HTAB  
 CN Lauroseptol  
 CN Lissolamine  
 CN Lissolamine A  
 CN Micol  
 CN N,N,N-Trimethyl-1-hexadecanaminium bromide  
 CN N,N,N-Trimethylhexadecan-1-ammonium bromide  
 CN N,N,N-Trimethylhexadecylammonium bromide  
 CN N-Cetyl-N,N,N-trimethylammonium bromide  
 CN N-Cetyltrimethylammonium bromide  
 CN N-Hexadecyl-N,N,N-trimethylammonium bromide  
 CN n-Hexadecyltrimethylammonium bromide  
 CN Palmityletrimethylammonium bromide  
 CN Pollacid  
 CN Quamonium  
 CN Rhodaquat M 242B99  
 CN Softex KW  
 CN Trimethylcetylammmonium bromide  
 CN Trimethylhexadecylammmonium bromide  
 CN Varisoft CTB 40  
 DR 12294-25-6, 104302-76-3, 108779-80-2, 69217-35-2, 79631-76-8  
 MF C19 H42 N . Br  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS,  
 BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,  
 CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*,  
 IFICDB, IFIPAT, IFIUDB, IPA, MRCK\*, MSDS-OHS, PIRA, PROMT, PS, RTECS\*,  
 SCISEARCH, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 CRN (6899-10-1)

Me<sub>3</sub>N—(CH<sub>2</sub>)<sub>15</sub>—Me

● Br<sup>-</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

*Handwritten mark*

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

*Chemical Search*

=> e ctab/cn

```

E1      1      CTA2/CN
E2      1      CTAA (BACILLUS LICHENIFORMIS STRAIN DSM13 GENE CTAA)/CN
E3      1 --> CTAB/CN
E4      1      CTAB (BACILLUS LICHENIFORMIS STRAIN DSM13 GENE CTAB)/CN
E5      1      CTAB (CYSTOBACTER FUSCUS GENE CTAB)/CN
E6      1      CTAB (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
          CTAB)/CN
E7      1      CTABR/CN
E8      2      CTAC/CN
E9      1      CTAC (BACILLUS LICHENIFORMIS STRAIN DSM13 GENE CTAC)/CN
E10     1      CTAC (CYSTOBACTER FUSCUS GENE CTAC)/CN
E11     1      CTAC (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
          CTAC)/CN
E12     1      CTAC 16/50/CN

```

=> s e3

L50 1 CTAB/CN

=> d scan

```

L50  1 ANSWERS  REGISTRY  COPYRIGHT 2007 ACS on STN
IN   1-Hexadecanaminium, N,N,N-trimethyl-, bromide (1:1)
MF   C19 H42 N . Br
CI   COM

```

$\text{Me}_3\text{N}^+-(\text{CH}_2)_{15}-\text{Me}$

●  $\text{Br}^-$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> => d ide l50

```

L50  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2007 ACS on STN
RN   57-09-0  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   1-Hexadecanaminium, N,N,N-trimethyl-, bromide (1:1)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   1-Hexadecanaminium, N,N,N-trimethyl-, bromide (9CI)
CN   Ammonium, hexadecyltrimethyl-, bromide (8CI)
CN   Hexadecyltrimethylammonium bromide (6CI)
OTHER NAMES:
CN   1-Hexadecyltrimethylammonium bromide

```

*52*

E34 1 DODECYLBENZENESULFONIC ACID ETHANOLAMINE SALT/CN  
 E35 1 DODECYLBENZENESULFONIC ACID ETHYLAMINE SALT/CN  
 E36 1 DODECYLBENZENESULFONIC ACID ETHYLENE DIAMINE/CN

=> e DODECYLBENZENESULFONIC ACID sodium/cn

E1 1 DODECYLBENZENESULFONIC ACID POTASSIUM SALT/CN  
 E2 1 DODECYLBENZENESULFONIC ACID PROPYLAMINE SALT/CN  
 E3 0 --> DODECYLBENZENESULFONIC ACID SODIUM/CN  
 E4 1 DODECYLBENZENESULFONIC ACID SODIUM SALT/CN  
 E5 1 DODECYLBENZENESULFONIC ACID STEARYLDIMETHYLAMINE SALT/CN  
 E6 1 DODECYLBENZENESULFONIC ACID TETRABUTYLPHOSPHONIUM SALT/CN  
 E7 1 DODECYLBENZENESULFONIC ACID TRIBUTYLBENZYLAMMONIUM SALT/CN  
 E8 1 DODECYLBENZENESULFONIC ACID TRIETHANOLAMINE SALT/CN  
 E9 1 DODECYLBENZENESULFONIC ACID TRIETHYLAMINE SALT/CN  
 E10 1 DODECYLBENZENESULFONIC ACID, BASIC CERIUM SALT/CN  
 E11 1 DODECYLBENZENESULFONIC ACID-1,6-HEXANEDIOL-SEBACIC ACID COPO  
 LYMER/CN  
 E12 1 DODECYLBENZENESULFONIC ACID-PALMITIC ACID-PENTAERYTHRITOL CO  
 POLYMER/CN

=> s e4

L51 1 "DODECYLBENZENESULFONIC ACID SODIUM SALT"/CN

=> d ide

L51 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 25155-30-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzenesulfonic acid, dodecyl-, sodium salt (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzenesulfonic acid, dodecyl-, sodium salt (8CI, 9CI)

OTHER NAMES:

CN 35SL  
 CN A 1-1575  
 CN A 41S  
 CN Abeson NAM  
 CN AKS 518-2  
 CN Alkanate DC  
 CN Anstex MJ 420  
 CN Arylan SBC  
 CN AS 101-1  
 CN Berol 496  
 CN Bio-Soft D 35X  
 CN Bio-Soft D 40  
 CN Bio-Soft D 40RC  
 CN Bio-Soft D 62  
 CN Bio-Soft LAS 40S  
 CN Biosoft 40S  
 CN C 550  
 CN C 560  
 CN Caflon NAS 30  
 CN Caflon SNA  
 CN Calsoft 90F  
 CN Calsoft F 90  
 CN Calsoft L 40  
 CN Calsoft L 50  
 CN Calsoft L 60  
 CN Conco AAS 35  
 CN Conco AAS 35H  
 CN Conco AAS 40S

CN Conco AAS 45S  
 CN Conoco C 550  
 CN DBS  
 CN Deterlon  
 CN Deterlon A  
 CN Dobanic 560  
 CN DoBS  
 CN Dodecylbenzenesulfonic acid sodium salt  
 CN DS 10  
 CN DS 60  
 CN DS 60 (surfactant)  
 CN Elecat S 412  
 CN Elfan WA 35  
 CN Elfan WA 50  
 CN Elfan WA Powder  
 CN Emulin B 22  
 CN EPA 219  
 CN F 25  
 CN F 90  
 CN F 90 (sulfonic acid)  
 CN FAW 01

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 863016-65-3, 12068-21-2, 12627-25-7, 12676-70-9, 11114-21-9, 177645-67-9,  
 1323-13-3, 128452-17-5, 122390-78-7, 57762-50-2, 58517-33-2, 56590-39-7,  
 60328-33-8, 63530-22-3, 18618-53-6, 19327-14-1, 94187-92-5, 37334-89-7,  
 68445-25-0, 138362-06-8, 71244-85-4, 76483-01-7, 142986-60-5, 147035-77-6,  
 82785-43-1, 83203-33-2, 82028-94-2, 83652-87-3, 83652-88-4, 83652-89-5,  
 90452-02-1, 88495-86-7, 28675-02-7, 39316-39-7, 39386-98-6, 39405-16-8,  
 52624-37-0, 170006-86-7, 178900-97-5, 254117-47-0, 352212-18-1

MF C18 H30 O3 S . Na

CI IDS, COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CABA,  
 CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHM, CSNB, DETHERM\*,  
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB\*, IFICDB,  
 IFIPAT, IFIUDB, IPA, MRCK\*, MSDS-OHS, PIRA, PROMT, RTECS\*, TOXCENTER,  
 ULIDAT, USPAT2, USPATFULL, USPATOLD

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CRN (27176-87-0)



D1—SO<sub>3</sub>H

Me—(CH<sub>2</sub>)<sub>11</sub>—D1

● Na

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9645 REFERENCES IN FILE CA (1907 TO DATE)

87 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9702 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d fcn

L51 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

CN Benzenesulfonic acid, dodecyl-, sodium salt (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzenesulfonic acid, dodecyl-, sodium salt (8CI, 9CI)

OTHER NAMES:

CN 35SL

CN A 1-1575

CN A 41S

CN Abeson NAM

CN AKS 518-2

CN Alkanate DC

CN Anstex MJ 420

CN Arylan SBC

CN AS 101-1

CN Berol 496

CN Bio-Soft D 35X

CN Bio-Soft D 40

CN Bio-Soft D 40RC

CN Bio-Soft D 62

CN Bio-Soft LAS 40S

CN Biosoft 40S

CN C 550

CN C 560

CN Caflon NAS 30

CN Caflon SNA

CN Calsoft 90F

CN Calsoft F 90

CN Calsoft L 40

CN Calsoft L 50

CN Calsoft L 60

CN Conco AAS 35

CN Conco AAS 35H

CN Conco AAS 40S

CN Conco AAS 45S

CN Conoco C 550

CN DBS

CN Deterlon

CN Deterlon A

CN Dobanic 560

CN DoBS

CN Dodecylbenzenesulfonic acid sodium salt

CN DS 10

CN DS 60

CN DS 60 (surfactant)

CN Elecat S 412

CN Elfan WA 35

CN Elfan WA 50

CN Elfan WA Powder

CN Emulin B 22

CN EPA 219

CN F 25  
CN F 90  
CN F 90 (sulfonic acid)  
CN FAW 01  
CN HS 85S  
CN Jugopon  
CN KB  
CN KB (surfactant)  
CN Lavagion  
CN Lipon LS 250  
CN Lipon PS 260  
CN Lipon PS 860  
CN Liponox LE 110  
CN Lutensit A-LBN 50  
CN Lutensit A-LBS  
CN Maranil  
CN Maranil 2G  
CN Maranil 55  
CN Maranil A  
CN Maranil A 25  
CN Maranil A 55  
CN Maranil Lab  
CN Maranil Paste A 55  
CN Marlon 375  
CN Marlon 375A  
CN Marlon A  
CN Marlon A 350  
CN Marlon A 365  
CN Marlon A 375  
CN Marlon A 396  
CN MB-VR  
CN Merpisap AP 85W  
CN Merpisap AP 90P  
CN MOA 215  
CN Nacconol 35SL  
CN Nacconol 40F  
CN Nacconol 40G  
CN Nacconol 90G  
CN Nansa 1106  
CN Nansa 1169P  
CN Nansa 1260  
CN Nansa 66  
CN Nansa HF 80  
CN Nansa HS 80  
CN Nansa HS 80S  
CN Nansa HS 80SA  
CN Nansa HS 85S  
CN Nansa HS 90S  
CN Nansa SL  
CN Nansa SS  
CN Nansa SSA 055  
CN Neogen S 20  
CN Neogen SC  
CN Neogen SC-F  
CN Neopelex 05  
CN Neopelex 25  
CN Neopelex 6  
CN Neopelex 6E  
CN Neopelex 6F  
CN Neopelex F 25



CN Neopelex F 60  
CN Neopelex F 65  
CN Neopelex G 15  
CN Neopelex G 20  
CN Neopelex G 65  
CN Neopelex N 6  
CN Nestapone  
CN Newcol 220L  
CN Newrex Powder F  
CN Newrex R  
CN Newrex Soft 60  
CN Newrex Soft 60N  
CN Newrex T  
CN Nissan Newrex F  
CN Nissan Newrex H  
CN Nissan Newrex R  
CN Nissan Newrex Soft 60  
CN Nissan Newrex T  
CN Nonylphenyl sodium sulfonate  
CN Oromin O  
CN Pelopon A  
CN Phenyl Sulfonate HSR  
CN Pionin A 41S  
CN Polystep A 15  
CN Polystep A 4  
CN Polystep A 7  
CN Polystep LAS 50  
CN Reworyl NKS 50  
CN Rhodacal DS 10  
CN Rhodacal DS 4  
CN Rhodacal LDS 22  
CN Richonate 1850  
CN Richonate 40B  
CN S 412  
CN Sandet 60  
CN Santomerse Me  
CN SC-F  
CN SDBS  
CN Sinnozon  
CN Siponate DS 10  
CN Siponate DS 4  
CN Siponate LDS 10  
CN Sodium dodecylbenzenesulfonate  
CN Sodium Dodecylbenzosulfonate  
CN Sodium dodecylphenylsulfonate  
CN Sodium laurylbenzenesulfonate  
CN Sodium laurylphenylsulfonate  
CN Sorpol 5060  
CN Sorpol 9775  
CN Sorpol DBNa  
CN Steinaryl NKS 100  
CN Steinaryl NKS 50  
CN Stepan DS 60  
CN Stepantan DS 40  
CN Stepatan DS 40  
CN Sulfaril Paste  
CN Sulframin 1207  
CN Sulframin 1240  
CN Sulframin 40  
CN Sulframin 85

CN Sulfuril 50  
 CN Taycapower BN 2070M  
 CN Taycapower LN 2065  
 CN Teikapawa BN 2060M  
 CN TME 020  
 CN TPL 456  
 CN Trepolate F 40  
 CN Trepolate F 95  
 CN TYS 101  
 CN Ultrawet 1T  
 CN Ultrawet 99LS  
 CN Vista C 550  
 CN Vista C 560  
 CN Vista SA 597  
 CN Witconate 1223L  
 CN Witconate 1238  
 CN Witconate 1240  
 CN Witconate 1250  
 CN Witconate 1260  
 CN Witconate 60B  
 CN Witconate 90  
 CN Witconate K  
 CN X 2073

=> => d fide

L62 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 13149-86-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3,6,9,12,15,18,21,24,27,30-Decaoxaocatetracontan-1-ol (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Ethanol, 2-[2-[2-[2-[2-[2-[2-[2-[2-(octadecyloxy)ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]-  
 MF C38 H78 O11  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA Caplus document type: Conference; Journal; Patent  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study)  
 RL.NP Roles from non-patents: PROC (Process); PRP (Properties); USES (Uses); NORL (No role in record)

PAGE 1-A

HO-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-

PAGE 1-B

-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-

## EAST Search History

L34	0	("7109152".pn. or "6673752".pn. or "5534172".pn. and "3833502".pn. or "3980571".pn. or "5170683".pn.) and (laser and (surfactant with (cationic or (non adj ionic) or anionic)) and (coolant or cooling))	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:55
L35	3	("7109152".pn. or "6673752".pn. or "5534172".pn. or "3833502".pn. or "3980571".pn. or "5170683".pn.) and (surfactant and (cationic or (non adj ionic) or anionic)) and (coolant or cooling)	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/09 17:57